Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) An isolated polypeptide selected from the group consisting of AAAFTGLTLLEQLDLSDNAQLR (SEQ ID NO: 26); LDLSDNAQLR (SEQ ID NO: 27); LDLSDDAELR (SEQ ID NO: 29); LDLASDNAQLR (SEQ ID NO: 30); LDLASDDAELR (SEQ ID NO: 31); LDALSDNAQLR (SEQ ID NO: 32); LDALSDDAELR (SEQ ID NO: 33); LDLSSDNAQLR (SEQ ID NO: 34); LDLSSDEAELR (SEQ ID NO: 35); DNAQLRWDPTT (SEQ ID NO: 36); DNAQLR (SEQ ID NO: 37); ADLSDNAQLRVVDPTT (SEQ ID NO: 41); LALSDNAQLRVVDPTT (SEQ ID NO: 42); LDLSDNAALRVVDPTT (SEQ ID NO: 43); LDLSDNAQLHVVDPTT (SEQ ID NO: 44); and LDLSDNAQLAVVDPTT (SEQ ID NO: 45).

2. (currently amended) An isolated nucleic acid encoding the polypeptide of claim 1.

3. (canceled)

4. (previously presented) A vector comprising the nucleic acid of claim 2.

5. (currently amended) An isolated host cell comprising the vector of claim 4.

6. (canceled)

7. (previously presented) A method of producing an antibody comprising the steps of: (a) immunizing a host with the host cell of claim 5; and (b) recovering the antibody.

8. (withdrawn) An antibody produced by the method of claim 7 or an antigen-binding fragment of said antibody.

9. (withdrawn – currently amended) An antibody or an antigen-binding fragment thereof that specifically binds to the polypeptide of claim 1, wherein the antibody is not the monoclonal antibody produced by hybridoma cell line HB 7E11 (ATCC# ~~accession~~ Accession No. PTA-4587).

10. (withdrawn) The antibody or antigen-binding fragment of claim 9, wherein the antibody (a) inhibits growth cone collapse of a neuron; (b) decreases the inhibition of neurite outgrowth and sprouting in a neuron; and (c) inhibits Nogo receptor-1 binding to a ligand.

11-12. (canceled)

13. (withdrawn) The antibody or antigen-binding fragment of claim 9, wherein the antibody is a monoclonal antibody.

14. (withdrawn – currently amended) The antibody or antigen-binding fragment of claim 9, wherein the antibody is a murine antibody.

15. (withdrawn) The antibody of claim 9, wherein the antibody is selected from the group consisting of a humanized antibody, a chimeric antibody and a single chain antibody.

16. (withdrawn) A method of inhibiting Nogo receptor-1 binding to a ligand, comprising the step of contacting Nogo receptor-1 with the antibody or antigen-binding fragment of claim 10.

17. (canceled)

18. (withdrawn) A method for inhibiting growth cone collapse in a neuron, comprising the step of contacting the neuron with the antibody or antigen-binding fragment thereof of claim 10.

19. (withdrawn) A method for decreasing the inhibition of neurite outgrowth or sprouting in a neuron, comprising the step of contacting the neuron with the antibody or antigen-binding fragment thereof of claim 10.

20-21. (canceled)

22. (withdrawn) A composition comprising a pharmaceutically acceptable carrier and the antibody or an antigen-binding fragment of claim 9.

23. (canceled)

24. (withdrawn) A method of promoting survival of a neuron at risk of dying, comprising contacting the neuron with an effective amount of the anti-Nogo receptor-1 antibody or antigen-binding fragment of claim 9.

25. (canceled)

26. (withdrawn) The method of claim 24, wherein the neuron is in a mammal.

27. (withdrawn) The method of claim 26, wherein the mammal displays signs or symptoms of multiple sclerosis, ALS, Huntington's disease, Alzheimer's disease, Parkinson's disease, diabetic neuropathy, stroke, traumatic brain injuries or spinal cord injury.

28. (withdrawn) A method of promoting survival of a neuron in a mammal, which neuron is at risk of dying, comprising (a) providing a cultured host cell expressing the anti-Nogo receptor-1 antibody or antigen-binding fragment thereof of claim 9; and (b) introducing the host cell into the mammal at or near the site of the neuron.

29. (withdrawn) A gene therapy method of promoting survival of a neuron at risk of dying, which neuron is in a mammal, comprising administering at or near the site of the neuron a viral vector comprising a nucleotide sequence that encodes the anti-Nogo receptor-1 antibody or antigen-binding fragment thereof of claim 9, wherein the anti-Nogo receptor-1 antibody or antigen-binding fragment is expressed from the nucleotide sequence in the mammal in an amount sufficient to promote survival of the neuron.